

TECHNICAL SESSION ICMAAE 2021

Day 1: Tuesday 22 June 2021				
8.30 – 9.00	Online attendance to the Congress IEC 2021 Zoom Room - Congress			
Opening 9.00 – 9.45	Opening Ceremony of the IIUM Engineering Congress 2021 Welcoming Remarks by The Dean, The Rector and The President Zoom Room - Congress			
9.45 – 10.00	Break & Networking Zoom Room - ICMAAE Lobby			
Keynote 1 10.00 – 10.45	Title: The Positive Impact of Disruptive Technology in Aviation MRO Industry Presenter: Prof. Dato' Ir. Ts. Dr. Mohamad Dali Isa, UniKL MIAT, Malaysia Chairperson: Prof. Dr. Meftah Hrairi, IIUM, Malaysia Zoom Room - ICMAAE Lobby			
10.45 – 11.00	Break & Networking Zoom Room - ICMAAE Lobby			
Keynote 2 11.00 – 11.45	Title: Opportunities and Challenges in the Next Generation Light Duty Vehicle Propulsion Systems Presenter: Ir. Azmi Osman, Proton Holdings Berhad, Malaysia Chairperson: Prof. Ir. Dr. Masjuki Hassan, IIUM, Malaysia Zoom Room - ICMAAE Lobby			
11.45 – 12.00	Break & Networking Zoom Room - ICMAAE Lobby			
12.00 – 13.00	Parallel Session 1 Zoom Room – ICMAAE Room A, B, C & D			
	ICMAAE Room A Aerodynamics & Aeroelasticity I Paper ID: 50, 58, 1	ICMAAE Room B Structures & Materials I Paper ID: 41, 102, 97	ICMAAE Room C Vehicle Dynamics & Control I Paper ID: 24, 84, 118	ICMAAE Room D Thermo-Fluids I Paper ID: 79, 39, 87
13.00 – 14.00	Lunch Break			

TECHNICAL SESSION ICMAAE 2021

Day 1: Tuesday 22 June 2021				
14.00 – 15.40	Parallel Session 2		Zoom Room – ICMAAE Room A, B, C & D	
	<u>ICMAAE Room A</u> Aerodynamics & Aeroelasticity II Paper ID: 56, 103, 107, 82, 72	<u>ICMAAE Room B</u> Aerospace Structures I Paper ID: 33, 124, 98, 122, 111	<u>ICMAAE Room C</u> Dynamics & Controls I Paper ID: 46, 16, 100, 28, 25	<u>ICMAAE Room D</u> Combustion & Emission Control Paper ID: 47, 55, 76, 63, 64
15.40 – 16.00	Break & Networking		Zoom Room – ICMAAE Lobby	
16.00 – 17.20	Parallel Session 3		Zoom Room – ICMAAE Room A, B, C & D	
	<u>ICMAAE Room A</u> Green Energy I Paper ID: 73, 114, 89, 115	<u>ICMAAE Room B</u> Vehicle Structures & Crashworthiness Paper ID: 35, 90, 44	<u>ICMAAE Room C</u> Structures & Materials II Paper ID: 68, 32, 71, 23	<u>ICMAAE Room D</u> Thermo-Fluids II Paper ID: 38, 93, 94, 15

TECHNICAL SESSION ICMAAE 2021

Day 2: Wednesday 23 June 2021				
Keynote 3 9.00 – 9.45	Title: Understanding the Requirement of Manufacturing Aerospace Workforce Presenter: Muhamad Khalizi Bin Abdul Razak, Naluri Cindai Sdn Bhd, Malaysia Chairperson: Prof. Dr. Waqar Asrar, IIUM, Malaysia Zoom Room - ICMAAE Lobby			
Keynote 4 9.45 – 10.30	Title: Vehicle Safety in Malaysia After 14 Years of MIROS Establishment Presenter: Khairil Anwar Bin Abu Kassim (Ir. Ts. Dr.), Adjunct Prof., Malaysian Institute of Road Safety Research (MIROS), Malaysia Chairperson: Assoc. Prof. Dr. Fadly Jashi Darsivan, IIUM, Malaysia Zoom Room - ICMAAE Lobby			
10.30 – 10.45	Break & Networking		Zoom Room - ICMAAE Lobby	
10.45 – 11.45	Parallel Session 4		Zoom Room – ICMAAE Room A, B, C & D	
	<u>ICMAAE Room A</u> Aerodynamics & Aeroelasticity III Paper ID: 67, 108, 91	<u>ICMAAE Room B</u> Aerospace Structures II Paper ID: 70, 127, 95	<u>ICMAAE Room C</u> Green Energy II Paper ID: 52, 74, 18	<u>ICMAAE Room D</u> Internet of Things Paper ID: 88, 62
11.45 – 12.00	Break & Networking		Zoom Room – ICMAAE Lobby	
12.00 – 13.00	Parallel Session 5		Zoom Room – ICMAAE Room A, B, C & D	
	<u>ICMAAE Room A</u> Aerospace Propulsion Paper ID: 119, 106, 101	<u>ICMAAE Room B</u> Structures & Materials III Paper ID: 17, 14, 96	<u>ICMAAE Room C</u> Vehicle Dynamics & Controls II Paper ID: 21, 51, 105	<u>ICMAAE Room D</u> Special Topics Paper ID: 19, 37, 86
13.00 – 14.00	Lunch Break			

TECHNICAL SESSION ICMAAE 2021

Day 2: Wednesday 23 June 2021				
14.00 – 15.40	Parallel Session 6		Zoom Room – ICMAAE A, B, C & D	
	<u>ICMAAE Room A</u> Aerodynamics & Aeroelasticity IV Paper ID: 113, 80, 99, 92, 85	<u>ICMAAE Room B</u> Structures & Materials IV Paper ID: 78, 60, 117, 20, 22	<u>ICMAAE Room C</u> NDT Paper ID: 61, 121, 123, 116, 125	<u>ICMAAE Room D</u> Special Topics Paper ID: 66, 77, 53, 126, 54
15.40 – 16.00	Break, & Networking		Zoom Room – ICMAAE Lobby	
16.00 – 17.20	Parallel Session 7		Zoom Room – ICMAAE Room A, B, C & D	
	<u>ICMAAE Room A</u> Modelling & Simulation Paper ID: 65, 45, 42, 69	<u>ICMAAE Room B</u> Aerospace Structures III Paper ID: 109, 110, 128, 112	<u>ICMAAE Room C</u> Structures & Materials V Paper ID: 27, 57, 34, 83	<u>ICMAAE Room D</u> Structures & Materials VI Paper ID: 75, 59, 104

ICMAAE'21 PARALLEL SESSION SCHEDULE



SESSION 1 (ICMAAE ROOM A) Aerodynamics & Aeroelasticity

Tuesday, June 22: 12:00 - 1.00pm (Asia / Kuala Lumpur GMT +8)

Chairman: Assoc. Prof. Dr. Erwin Sulaeman
Co-chairman: Asst. Prof. Dr. Nur Azam Bin Abdullah

12.00 – 12.20 pm	Khaoula Qaissi ¹ , Omer Elsayed ¹ , Mustapha Faqir ¹ and Elhachmi Essadiqi ¹ ICMAAE21-50: A Validation Study of The Aerodynamic Behaviour of the NREL Phase VI Wind Turbine: Three-Dimensional Rotational Case <i>¹Université Internationale de Rabat</i>
12.20 – 12.40 pm	S. Boughou ¹ , A. Omar ¹ , O. Elsayed ¹ and M. Aldheeb ² ICMAAE21-58: Numerical Investigations of Aerodynamic Characteristics of High-lift Low Reynolds Number S1223 Airfoil <i>¹International University of Rabat, ²International Islamic University Malaysia</i>
12.40 – 1.00 pm	Afaq Altaf ¹ , Mohammed Abdulmalek Mohammed Aldheeb ² , Ashraf Ali Omar ³ , Waqar Asrar ² ICMAAE21-1: Effect of Roll Angle Configurations of a Reverse Delta Type Add-on Device on Wing tip Vortex Alleviation <i>¹New York Institute of Technology, ²International Islamic University Malaysia, ³International University of Rabat</i>

SESSION 1 (ICMAAE ROOM B) Structures & Materials I

Tuesday, June 22: 12:00 - 1.00pm (Asia / Kuala Lumpur GMT +8)

Chairman: Assoc. Prof. Dr. Jaffar Syed Mohamed Ali
Co-chairman: Asst. Prof. Dr. Hanan Mokhtar

12.00 – 12.20 pm	Nasr Bekraoui, Zakaria El Qoubaa, Hajar Chouiyakh, Mustapha Faqir and Elhachmi Essadiqi ICMAAE21-41: The interaction between Mechanical properties, geometry and chemical content of Natural Fibres: A statistical exploratory analysis <i>Rabat</i>
12.20 – 12.40 pm	Ir.Kuganeswaran Nadarasa, Dr.Afikah Rahim and Prof. Dr. Nazri Ali ICMAAE21-102: Ground Improvement Using Prefabricated Vertical Drains (PVDs) and Validation by Plaxis 3D – A Case Study <i>Universiti Teknologi Malaysia</i>
12.40 – 1.00 pm	Adib Hamdani ^{1,2*} , Pankaj Pankaj ² ICMAAE21-97: Numerical Simulation of Impacted Elastic Bar <i>¹International Islamic University Malaysia, ²The University of Edinburgh</i>

SESSION 1 (ICMAAE ROOM C) Vehicle Dynamics & Control

Tuesday, June 22: 12:00 - 1.00pm (Asia / Kuala Lumpur GMT +8)

Chairman: Prof. Dr. Waleed Fekry Faris
Co-chairman: Asst. Prof. Dr. Muhammad Bin Abdullah

12.00 – 12.20 pm	Mohd Azri Abd Mutalib ¹ , Norsinnira Zainul Azlan ² ICMAAE21-24: Development of Lab Scale maveP Mobility Prototype <i>¹SIRIM Berhad, ²International Islamic University Malaysia</i>
12.20 – 12.40 pm	Mohamed Al-Sideque Zainuddin ¹ , Muhammad Abdullah ² , Salmiah Ahmad ² , Ataur Rahman ² ICMAAE21-84: Performance Comparison between Predictive Functional Control and PID Algorithms for an Automobile Cruise System <i>¹Kolej Kemahiran Tinggi MARA, Melaka, ²International Islamic University Malaysia</i>
12.40 – 1.00 pm	Nur Hanisah Azmi ¹ , Ali Sophian ¹ , Ali Aryo Bawono ² ICMAAE21-118: Detection of Road Lane Markings for Road Inspection by using Deep Learning <i>¹International Islamic University Malaysia, ²TUMCREATE Ltd Singapore</i>

SESSION 1 (ICMAAE ROOM D) Structures & Materials I

Tuesday, June 22: 12: 00 - 1.00pm (Asia / Kuala Lumpur GMT +8)

Chairman: Asst. Prof. Dr. Syed Noh Syed Abu Bakar
Co-chairman: Assoc. Prof. Dr. Moumen Mohammed Idres

12.00 – 12.20 pm	Nawal Achak, Ouafae Rkibi, Bennasser Bahrar and Kamal Gueraoui ICMAAE21-79: Investigation of Quasi-Steady Friction in Viscoplastic Fluid Flow in a Pipe <i>Morocco</i>
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12.20 – 12.40 pm	A. H. Hamisa ^{1,2} , W. H. Azmi ¹ , T. M. Yusof ¹ , M.F. Ismail ^{1,3} , A.I. Ramadhan ^{1,4} ICMAAE21-39: Rheological Properties of TiO ₂ /POE Nanolubricant For Automotive Air-Conditioning System <i>¹Universiti Malaysia Pahang, ³University College of Yayasan Pahang, ³Universiti Teknikal Malaysia Melaka, ⁴Universitas Muhammadiyah Jakarta</i>
12.40 – 1.00 pm	Suaib Al Mahmud ¹ , Ahmad Faris Ismail ¹ ICMAAE21-87: Multiphase CFD Investigation on Convective Heat Transfer Enhancement for Turbulent Flow of Water-Al ₂ O ₃ Nanofluid <i>¹International Islamic University Malaysia</i>



SESSION 2 (ICMAAE ROOM A)

Aerodynamics & Aeroelasticity II

Tuesday, June 22: 2:00 – 3:40pm (Asia / Kuala Lumpur GMT +8)

Chairman: Asst. Prof. Dr. Nur Azam Bin Abdullah
Co- chairman: Asst. Prof. Dr. Mohamed Aldheeb

2.00 – 2.20 pm	Fatima-zahra Hachimy ¹ , Ashraf A. Omar ¹ , Omer Elsayed ¹ ICMAAE21-56: The Accuracy of the Numerical Solution in Predicting Ahmed Body Components Drag Coefficients <i>¹International University of Rabat</i>
2.20 – 2.40 pm	Mohamed Ibren ¹ , Amelda Dianne ^{1*} , Waqar Asrar ¹ , Erwin Sulaeman ¹ ICMAAE21-103: Laminar Separation Bubble and Flow Topology of NACA 0015 at Low Reynolds Number <i>¹International Islamic University Malaysia</i>
2.40 – 3.00 pm	Erwin Sulaeman, Mohamed Ibren, Amelda Dianne and Adri Zainal Abidin ICMAAE21-82: Influence of Surface Discontinuity on Sound Absorption Coefficient of Vehicle Interior Material <i>International Islamic University Malaysia</i>
3.00 – 3.20 pm	Nur Azam Abdullah*, Nor Izzuddin Ismail, Izham Izzati Ismail, Muhammad Hanafi Azami, Norhuda Hidayah Nordin, Nor Aiman Sukindar, Ahmad Joahari Abu Bakar, Noriza Dani ICMAAE21-72: Aerodynamic assessment and development of Smokey SAM Prototype (TRL-6) <i>International Islamic University Malaysia</i>
3.20 – 3.40 pm	

SESSION 2 (ICMAAE ROOM B)

Aerospace Structures I

Tuesday, June 22: 2:00 - 3.40pm (Asia / Kuala Lumpur GMT +8)

Chairman: Prof. Dr. Meftah Hrairi
Co- chairman: Assoc. Prof. Dr. Salmiah Ahmad

2.00 – 2.20 pm	El Arbi Hajjioui ¹ , Mustapha Faqir ¹ , Kenza Bouchaâla ^{1,2} , Elhachmi Essadiqi ¹ , Mounia Malki ¹ ICMAAE21-33: A review of precipitation, mechanical properties and additive manufacturing for the third generation of Aluminum Lithium alloys used in aeronautic applications <i>¹International University of Rabat, ²Mohammed V University</i>
2.20 – 2.40 pm	Mohamed Djemana ¹ , Rania Benyoucef ² , Meftah Hrairi ³ ICMAAE21-124: Numerical modelling and applied simulation for the vibration monitoring of a ventilation turbine <i>¹École Supérieure de Technologies Industrielles, ²University of Batna, ³International Islamic University Malaysia</i>
2.40 – 3.00 pm	Adnan Akhlaq, Mohd. Sultan Ibrahim Shaik Dawood, Mohamed Ali Jaffar Syed and Erwin Sulaeman ICMAAE21-98: A Review on the Effect of Higher-Order Nonlinear Theories on the Analysis of Piezoelectric Laminates <i>International Islamic University Malaysia</i>
3.00 – 3.20 pm	Tejal Ikhar, Shubham Gadhave and Sagar Lone ICMAAE21-122: Structural Analysis of Bolted Nozzle Flange of Saturn V Rocket Engine <i>India</i>
3.20 – 3.40 pm	Mohamed Ali Jaffar Syed and Afiq Safwan Ahmad Afandi ICMAAE21-111: Educational Software for Stress Analysis of Tapered Multi-Spar Wings with Multi-Booms <i>International Islamic University Malaysia</i>

SESSION 2 (ICMAAE ROOM C)

Dynamics & Controls

Tuesday, June 22: 2:00 – 3:40pm (Asia / Kuala Lumpur GMT +8)

Chairman: Assoc. Prof. Dr. Mohamed El Sayed Aly Abd El Aziz Okasha
Co- chairman: Asst. Prof. Dr. Alia Farhana Binti Abdul Ghaffar

2.00 – 2.20 pm	Nor Mohd Haziq Norsahperi ¹ , Salmiah Ahmad ² , Siti Fauziah Toha ² , Mohd Azri Abd Mutalib ³ ICMAAE21-46: Design, Simulation and Experiment of PSO-tuned FOPID Controller for Height Position Control of a Scissor Mechanism Platform <i>¹University Putra Malaysia, ²International Islamic University Malaysia, ³SIRIM Berhad</i>
2.20 – 2.40 pm	Ibrahim Mustafa Mehedi, Mohd Heidir Mohd Shah and Salmiah Ahmad ICMAAE21-16: Linear Positional and Speed Control of Servo Cart using Inverse Dynamic Control

2.40 – 3.00 pm	Yazan Aljeroudi, Erwin Sulaeman and Ari Legowo ICMAAE21-100: Dynamic Fingerprint Benchmarking Model for WiFi Indoor localization <i>International Islamic University Malaysia</i>
3.00 – 3.20 pm	Norsinnira Zainul Azlan and Hiroshi Yamaura ICMAAE21-28: Adaptive Force-Tracking Impedance Control for Unknown Time-Varying Environment <i>International Islamic University Malaysia</i>
3.20 – 3.40 pm	

SESSION 2 (ICMAAE ROOM D)

Combustion & Emission Control

Tuesday, June 22: 2:00 – 3:40pm (Asia / Kuala Lumpur GMT +8)

Chairman	Asst. Prof. Dr. Sanisah Saharin
Co- chairman:	Asst. Prof. Dr. Tengku Nordayana Akma Binti Tuan Kamaruddin

2.00 – 2.20 pm	Amzar Zulkifli Syahir, Haji Hassan Masjuki, Mohd Nur Ashraf Yusoff and Tengku Muhammad Ibrahim ICMAAE21-47: Frictional Power Evaluation of Additive-Mixture in Trimethylolpropane Trioleate Oil using Single Cylinder Diesel Engine <i>¹University of Malaysia</i>
2.20 – 2.40 pm	Ameer Suhel ¹ , Norwazan Abdul Rahim ¹ , Mohd Rosdzimin Abdul Rahman ¹ , Khairol Amali Bin Ahmad ¹ , Umrah Khan ² , Yew Heng Teoh ³ , Noh Zainal Abidin ¹ ICMAAE21-55: Impact of ZnO nanoparticles as additive on performance and emission characteristics of a diesel engine fueled with waste plastic oil: An experimental investigation <i>¹Universiti Pertahanan Nasional Malaysia, ²Jawaharlal Nehru Technological University-Hyderabad, ³Universiti Sains Malaysia</i>
2.40 – 3.00 pm	Nasrul Ilminnafik ¹ , Mustapa ¹ , Faiz Firdausi ³ , Luluk Fitri Yani ¹ , Intan Hardiatama ¹ , Ahmad Adib Rosadi ¹ , Andi Sanata ¹ ICMAAE21-76: Spray Characteristics of a mixture of biodiesel and ethanol fuel <i>¹Universiti of Jember</i>
3.00 – 3.20 pm	Amir Shahidi Bin Zaidy and Tengku Nordayana Akma Binti Tuan Kamaruddin ICMAAE21-63: Effects of Different Engine Oil Types on Engine Performance and In-cylinder Combustion <i>International Islamic University Malaysia</i>
3.20 – 3.40 pm	Muhammad Hadzim Bin Zulimran and Tengku Nordayana Akma Binti Tuan Kamaruddin ICMAAE21-64: Effects of Different Fuel Additive Quantity on Engine Performance and In-cylinder Combustion <i>International Islamic University Malaysia</i>



SESSION 3 (ICMAAE ROOM A)

Green Energy I

Tuesday, June 22: 4:00 – 5:20pm (Asia / Kuala Lumpur GMT +8)

Chairman	Asst. Prof. Dr. Nabilah Ramli
Co- chairman:	Prof. Dr. Waleed Fekry Faris

4.00 – 4.20 pm	Ataur Rahman ICMAAE21-73: Activated Carbon-ZnO/CuO Conductive Polymer Structural Electric Vehicle Energy Storage System <i>International Islamic University Malaysia</i>
4.20 – 4.40 pm	Revichandran Rajeenderan, Mohamed Ali Jaffar Syed, Mohiuddin A.K. M. and Moumen Idres ICMAAE21-114: Energy Usage Efficiency, Optimization and Energy Conservation in Malaysian Universities <i>International Islamic University Malaysia</i>
4.40 – 5.00 pm	Muhammad Faiz Ahmad Fauzi and Muhammad Saifuddin Mohamed Rehan ICMAAE21-89: Study on Impact of Motorcycle Ride Hailing Service on Energy Consumption and GHG Emission in Land Transport in Malaysia <i>International Islamic University Malaysia</i>
5.00 – 5.20 pm	Faleh F.F. Hujailan ¹ , Md Abdul Maleque ¹ , Md Mustafizur ² ICMAAE21-115: Energy Efficiency and Optimization in Buildings for Sustainable Development in Malaysia <i>International Islamic University Malaysia, ²Universiti Malaysia Pahang</i>

SESSION 3 (ICMAAE ROOM B)

Vehicle Structures & Crashworthiness

Tuesday, June 22: 4:00 – 5:20pm (Asia / Kuala Lumpur GMT +8)

Chairman	Asst. Prof. Dr. Hanan Mokhtar
Co- chairman:	Assoc. Prof. Dr. Mohd Sultan Ibrahim

4.00 – 4.20 pm	Mohd Hafiz Johari ^{1,2} , Khairil Anwar Abu Kassim ² , Yahaya Ahmad ² , Sharifah Nabilah Nursyuhada Syed Muhaimin ² , Mohd Radzi Abu Mansor ¹ ICMAAE21-35: Crashworthiness of Light Cab Commercial: A Systematic Review <i>¹Universiti Kebangsaan Malaysia</i>
4.20 – 4.40 pm	Mohd Zuhairi Zainol ¹ , Zubair Khalil ¹ ICMAAE21-44: Effect Of Stress Severe Shot Peening On Fatigue Performance Of Coil Spring <i>¹Universiti Malaysia Pahang</i>

SESSION 3 (ICMAAE ROOM C)

Structures & Materials II

Tuesday, June 22: 4:00 – 5:20pm (Asia / Kuala Lumpur GMT +8)

Chairman: Asst. Prof. Dr. Muhammad Hanafi Azami
Co- chairman: Asst. Prof. Dr. Adib Hamdani Bin Rosli

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| 4.00 – 4.20 pm | Sara Bendrhir, Kenza Bouchaala, Lahcen Azrar and Elhachmi Essadiqi
ICMAAE21-68: Numerical simulation of thickness distribution during deep drawing process | Morocco |
| 4.20 – 4.40 pm | Salina Budin ¹ , Normariah Che Maideen ¹ , Koay Mei Hyie ¹ , Hamid Yusoff ¹ , Halim Ghafar ¹ ,
ICMAAE21-32: Comparative Study on Degradation of Polylactic Acid/ Syzygium Aromaticum Composites Ageing
in Natural Weathering and Soil Burial | ¹ Universiti Teknologi MARA |
| 4.40 – 5.00 pm | Farid Othman ^{1,2} , Nur Azam Abdullah ¹ , Erwin Sulaeman ¹ , Sher Afghan Khan ¹
ICMAAE21-71: Dosing Rate Assessment of Lime Dosage in Water Treatment Application Utilising Pneumatic
System | ¹ International Islamic University Malaysia, ² Aqua Oleo Sdn Bhd |
| 5.00 – 5.20 pm | Wazed Ibne Noor ¹ , Tanveer Saleh ¹ , Mir Akmam Noor Rashid ¹ and Azhar Bin Mohd Ibrahim ¹
ICMAAE21-23: Effect of Process Parameters on the Laser Microdrilling Performance Of Stainless Steel,
Aluminium and Copper | ¹ International Islamic University Malaysia |
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SESSION 3 (ICMAAE ROOM D)

Thermo-Fluids II

Tuesday, June 22: 4:00 – 5:20pm (Asia / Kuala Lumpur GMT +8)

Chairman: Assoc. Prof. Dr. Moumen Mohammed Idres
Co- chairman: Asst. Prof. Dr. Mohd Farid Bin Aladdin

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| 4.00 – 4.20 pm | M.F. Ismail ^{1,2} , W. H. Azmi ¹ , R. Mamat ¹ , A.H. Hamisa ^{1,3}
ICMAAE21-38: Investigation of Newtonian Behaviour and Dynamic Viscosity of TiO ₂ /PVE Nanolubricants for
Refrigeration System | ¹ Universiti Malaysia Pahang, ² Universiti Teknikal Malaysia Melaka,
³ University College of Yayasan Pahang |
| 4.20 – 4.40 pm | Zairul Azrul Zakaria ¹ , Zafri Azran Abdul Majid ¹ , Muhammad Amin Harun ¹ , Ahmad Faris Ismail ¹ , Sany Izan Ihsan ¹ ,
Kamaruzzaman Sopian ² , Amir Abdul Razak ³ , Ahmad Fadzil Sharol ³
ICMAAE21-93: Experimental Investigation of Integrated Energy Storage on Thermal Performance Enhancement
of Evacuated Glass-Thermal Absorber Tube Collector (EGATC) for Air Heating Application | ¹ International Islamic University Malaysia, ² Universiti Kebangsaan Malaysia,
³ Universiti Malaysia Pahang |
| 4.40 – 5.00 pm | Muhammad Amin Harun ¹ , Zafri Azran Abdul Majid ¹ , Zairul Azrul Zakaria ¹ , Ahmad Faris Ismail ¹ , Sany Izan Ihsan ¹ ,
Kamaruzzaman Sopian ² , Amir Abdul Razak ³ , Ahmad Fadzil Sharol ³
ICMAAE21-94: Analysis Performance of Flat Plate Base-Thermal Cell Absorber (FPBTCA): Low Thickness
Design | ¹ International Islamic University Malaysia, ² Universiti Kebangsaan Malaysia,
³ Universiti Malaysia Pahang |
| 5.00 – 5.20 pm | Faleh F.F. Hujailan ¹ , Md Abdul Maleque ^{1*} and Md Mustafizur ²
ICMAAE21-15: Comparative Study on Performance of Flat Plate and Evacuated Tube Collectors Solar Water
Heater System | ¹ International Islamic University Malaysia, ² Universiti Malaysia Pahang |
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SESSION 4 (ICMAAE ROOM A)

Aerodynamics & Aeroelasticity III

Wednesday, June 23: 10:45 – 11:45am (Asia / Kuala Lumpur GMT +8)

Chairman Asst. Prof. Dr. Alia Farhana Binti Abdul Ghaffar
Co-chairman: Asst. Prof. Dr. Amelda Dianne Andan

10.45 – 11.05 am	Hindawan Hariowibowo ^{1,2} , Ony Arifianto ¹ , Hisar Manongam Pasaribu ¹ , Hari Muhammad ¹ ICMAAE21-67: Detection and Prevention of Pilot-Induced-Oscillation on Fighter Aircraft Fxx During Design Phase <i>¹Insitut Teknologi Bandung, ²Indonesian Aerospace</i>
11.05 – 11.25 am	Izham Izzat Ismail ¹ , Nur Husnina Aufa Rozainuddin ¹ , Norhuda Hidayah Nordin ¹ , Muhammad Hanafi Azami ¹ ICMAAE21-91: Computational Fluid Dynamics Modelling of Hybrid Rocket Flow-Fields <i>¹International Islamic University Malaysia</i>
11.25 – 11.45 am	

SESSION 4 (ICMAAE ROOM B)

Aerospace Structures II

Wednesday, June 23: 10:45 – 11:45am (Asia / Kuala Lumpur GMT +8)

Chairman Asst. Prof. Dr. Wan Luqman Hakim Bin Wan Abdul Hamid
Co-chairman: Asst. Prof. Dr. Muhammad Saifuddin Mohd Rehan

10.45 – 11.05 am	Sharis-Shazzali Shahimi, Nur Azam Abdullah, Ameen Topa, Meftah Hrairi and Ahmad Faris Ismail ICMAAE21-70: Numerical modelling of bird strike on a rotating engine blades based on variations of porosity density <i>International Islamic University Malaysia</i>
11.05 – 11.25 am	Mumtahina Rahnuma ¹ , Md. Mehadi Hassan Chowdhury ² , Nihal Ahmed ³ , Ashfaq Ahmed ⁴ ICMAAE21-127: Structural Analysis of Continuous I Beam of Steel with Crack Using Finite Element Simulation <i>¹Rajshahi University of Engineering & Technology, ²Sylhet Engineering College, ³National Nanotechnology Research Center, ⁴University of CaliforniaXX</i>
11.25 – 11.45 am	A. M. Asif ¹ , Norfazrina H. M. Yatim ¹ ICMAAE21-95: Effect Of Wing Skin Thickness And Material On The Stresses In Aircraft Wing Structure <i>¹International Islamic University Malaysia</i>

SESSION 4 (ICMAAE ROOM C)

Green Energy II

Wednesday, June 23: 10:45 – 11:45am (Asia / Kuala Lumpur GMT +8)

Chairman Asst. Prof. Dr. Tengku Nordayana Akma Binti Tuan Kamaruddin
Co-chairman: Prof. Dr. Mohammed Ataur Rahman

10.45 – 11.05 am	Nur Fadhah Mohd Zawawi ¹ , Mohd Rafi Yaacob ¹ , Sazali Abd Wahab ² , Khairil Wahidin Awang ¹ , Muhammad Ehsan Mohd Eidris ³ ICMAAE21-52: Green Vehicle, Incentives and Policies: A View from Logistics Companies in Malaysia <i>¹Universiti Malaysia Kelantan, ²Universiti Putra Malaysia, ³Petroleum Nasional Berhad (Petronas)</i>
11.05 – 11.25 am	Ataur Rahman, Sany Ihsan, Muhammad Abdullah, Salmiah Ahmad and Alia Farhana Abdul Ghaffar ICMAAE21-74: Fuel Cell Hybrid Technology for the Retrofitting Electric Shuttle Bus <i>International Islamic University Malaysia</i>
11.25 – 11.45 am	Nurul Ilya Basharuddin, Wan Luqman Hakim Wan A Hamid and Nor Aiman Sukindar ICMAAE21-18: Adaptive Solar Panel <i>International Islamic University Malaysia</i>

SESSION 4 (ICMAAE ROOM D)

Internet of Things

Wednesday, June 23: 10:45 – 11:45am (Asia / Kuala Lumpur GMT +8)

Chairman Asst. Prof. Dr. Muhammad Bin Abdullah
Co-chairman: Asst. Prof. Dr. Hilmi Hela Ladin

10.45 – 11.05 am	Ataur Rahman ICMAAE21-88: Artificial Intelligent IoT Braking System for Passenger Vehicle <i>International Islamic University Malaysia</i>
11.05 – 11.25 am	Mohd Firdaus Shamsuddin and Muhammad Hanafi Azami ICMAAE21-62: Design and Prototyping of IoT Edge Device for Vibrational Study of Drilling Process of Advanced Composite Manufacturing in Aerospace Industry <i>International Islamic University Malaysia</i>
11.25 – 11.45 am	



SESSION 5 (ICMAAE ROOM A)

Aerodynamics & Aeroelasticity III

Wednesday, June 23: 12:00 – 1:00pm (Asia / Kuala Lumpur GMT +8)

Chairman: Prof. Dr. Sher Afghan Khan
Co- chairman: Assoc. Prof. Dr. Jaffar Syed Mohamed Ali

12.00 – 12.20 pm	Mahamadsalman Warimani ¹ , Muhammad Hanafi Azami ¹ , Sher Afghan Khan ¹ , Ahmad Faris Ismail ¹ , Sanisah Saharin ¹ , Ahmad Kamal Ariffin ² , and Vijaykumar Chavan ³ ICMAAE21-119: Analytical Assessment of Blended Fuels for Pulse Detonation Engine Performance ¹ International Islamic University Malaysia, ² Universiti Kebangsaan Malaysia, ³ Smt. Kamala & Sri Venkappa M. Agadi College of Engineering & Technology
12.20 – 12.40 pm	Moumen Idres ¹ and Muhamad Adi Muqri Saiful Azmi ¹ ICMAAE21-106: Computational Prediction of The Performance Map of A Transonic Axial Flow Rotor ¹ International Islamic University Malaysia
12.40 – 1.00 pm	Izham Izzat Ismail ¹ , Norhuda Hidayah Nordin ¹ , Muhammad Hanafi Azami ¹ , Nur Azam Abdullah ¹ ICMAAE21-101: Metals and Alloys Additives as Enhancer for Rocket Propulsion ¹ International Islamic University Malaysia

SESSION 5 (ICMAAE ROOM B)

Structures & Materials III

Wednesday, June 23: 12:00 – 1:00pm (Asia / Kuala Lumpur GMT +8)

Chairman: Asst. Prof. Dr. Muhammad Saifuddin Mohd Rehan
Co- chairman: Asst. Prof. Dr. Muhammad Hanafi Azami

12.00 – 12.20 pm	Normariah Che Maideen ¹ , Mohd Ikmal Hisham Abdul Rahim ¹ , Salina Budin ¹ , Koay Mei Hyie ¹ , Hamid Yusoff ¹ ICMAAE21-17: Effect Of Layer Thickness On Repeatability Of 3D Printed Pla Parts Produced Using Openware 3D Printer ¹ Universiti Teknologi MARA
12.20 – 12.40 pm	Mohd Khairul Efni Norman and Mohd Yussni Hashim ICMAAE21-14: Tensile Strength Of Single Banana Fibers (SBFs) Improved By Novel Alkaline Treatment Universiti Tun Hussein Onn
12.40 – 1.00 pm	Adib Hamedani ^{1,2} , Pankaj Pankaj ² ICMAAE21-96: A Closed-Form Solution Of Drop Test On An Elastic Bar: Benchmarking Force Response Of The Restrained Bar to Impact ¹ International Islamic University Malaysia, ² The University of Edinburgh

SESSION 5 (ICMAAE ROOM C)

Vehicle Dynamics & Control II

Wednesday, June 23: 12:00 – 1:00pm (Asia / Kuala Lumpur GMT +8)

Chairman: Prof. Dr. Mohammed Ataur Rahman
Co- chairman: Assoc. Prof. Dr. Mohamed El Sayed Aly Abd El Aziz Okasha

12.00 – 12.20 pm	Syamsul Azrin Kamaruddin ¹ , Hairulazwan Hashim ¹ , Halim Mamat ² , Norhafiza Samion ¹ , Ida Aryanie Bahrudin ¹ , Abdul Halim Omar ¹ , Mohd Faizal Mohamed Noor ¹ ICMAAE21-21: Vimps: Visualization of Power Supervisory Control and Data Acquisition (SCADA) Event Log for Efficient Railway Monitoring ¹ Universiti Tun Hussein Onn Malaysia, ² Keretapi Tanah Melayu Berhad
12.20 – 12.40 pm	Mohamad Nazmi ¹ , Mohamed Okasha ^{1,2} , Aizat Aasim ^{1,2} , Moumen Idres ¹ ICMAAE21-51: Monitoring The IIUM River using Unmanned Aerial Vehicle and Image Classification ¹ International Islamic University Malaysia, ² United Arab Emirates University
12.40 – 1.00 pm	Muhammad Abdullah ¹ , Moumen Idres ¹ , Mohd Azan ¹ ICMAAE21-105: Model Predictive Control for Regulating Fuel Cell Stack Temperature and Air Flow Rate ¹ International Islamic University Malaysia

SESSION 5 (ICMAAE ROOM D)

Special Topics I

Wednesday, June 23: 12:00 – 1:00pm (Asia / Kuala Lumpur GMT +8)

Chairman: Asst. Prof. Dr. Mohd. Azan Mohammed Sapardi
Co- chairman: Asst. Prof. Dr. Fatimah Dzaharudin

12.00 – 12.20 pm	Mohammed Rafeeq ¹ , Siti Fauziah Toha ¹ , Salmiah Ahmad ¹ , Mohd Asyraf Mohd Razib ¹ ICMAAE21-19: Virtual Prototype-Based Kinematic Modeling and Simulation of A Multi-Mode Amphibious Robot ¹ International Islamic University Malaysia
12.20 – 12.40 pm	Nurul Nafisah Kamis ¹ , Salmiah Ahmad ¹ , Abd. Halim Embong ¹ ErwinSulaeman ¹ ICMAAE21-37: Error driven Fuzzy Logic Controller (FLC) for Spherical Mobile Robot: Simulation & Experimental Performance Analysis ¹ International Islamic University Malaysia
12.40 – 1.00 pm	Assadullah, M, Khan, Sher Afghan and Sulaeman, E. ICMAAE21-86: High-Speed Tunnels: A Futuristic Approach International Islamic University Malaysia



SESSION 6 (ICMAAE ROOM A)

Aerodynamics & Aeroelasticity IV

Wednesday, June 23: 2:00 – 3:40pm (Asia / Kuala Lumpur GMT +8)

Chairman: Asst. Prof. Dr. Mohamed Aldheeb
Co- chairman: Prof. Dr. Sher Afghan Khan

2.00 – 2.20 pm	Muhammad Hafiz M. Shaari and Mohamed Ali Jaffar Syed ICMAAE21-113: Aerodynamics of Oblique Wing Configuration <i>International Islamic University Malaysia</i>
2.20 – 2.40 pm	Erwin Sulaeman ICMAAE21-80: Accurate Critical Mach Number Approximation of Airfoil in Compressible Flow <i>International Islamic University Malaysia</i>
2.40 – 3.00 pm	Izham Izzat Ismail ¹ and Muhammad Hanafi Azami ¹ ICMAAE21-92: Thrust Chamber Dynamic and Propulsive Performance of Biofuels Under Detonation Combustion <i>¹International Islamic University Malaysia</i>
3.00 – 3.20 pm	Nur Marissa Kamarul Baharin, Ahmad Hussein Abdul Hamid, Syed Noh Syed Abu Bakar and Mohd Azan Mohammed Sapardi ICMAAE21-85: Study on Flow Structure Behind Multiple Bluff Bodies in a Tandem Arrangement under the Effect of Magnetic Field <i>International Islamic University Malaysia</i>
3.20 – 3.40 pm	

SESSION 6 (ICMAAE ROOM B)

Structures & Materials IV

Wednesday, June 23: 2:00 – 3:40pm (Asia / Kuala Lumpur GMT +8)

Chairman: Asst. Prof. Dr. Adib Hamdani Bin Rosli
Co- chairman: Asst. Prof. Dr. Wan Luqman Hakim Bin Wan Abdul Hamid

2.00 – 2.20 pm	Mouad Bellahkim ¹ , Ahmed Ouezgan ¹ , Youssef Benboursas ¹ , Aziz Maziri ¹ , El hassan Mallil ¹ and Jamal Echaabi ¹ ICMAAE21-78: 3D finite element analysis of laminated composites under three-point bending <i>¹University of Casablanca</i>
2.20 – 2.40 pm	C. K. Ng ¹ , K.Y. Sara Lee ¹ , C. H. Tan ¹ , S. Ramesh ^{2,3} , C. Y. Tan ² , C. H. Ting ⁴ , Y. D. Chuah ⁴ And U. Sutharsini ⁷ ICMAAE21-60: Characterization and Sintering Properties of Hydroxyapatite Bioceramics Synthesized from Biowaste <i>¹Tunku Abdul Rahmani University College, ²Universiti Malaya, ³Universiti Teknologi Brunei, ⁴Universiti Tunku Abdul Rahman, ⁵University of Jaffna</i>
2.40 – 3.00 pm	Renita S. Monis ^{1,3} , Asha Crasta ² , Sher Afghan Khan ² , Shamitha ¹ , Anitha D. Bayar ¹ , Erwin Sulaeman ² ICMAAE21-130: Comparative Study Of Quasi Steady And Unsteady Damping Derivatives For Delta Wings In Hypersonic Flow <i>¹Mangalore Institute of Technology and Engineering, ²International Islamic University Malaysia, ³SMVITKM, Bantakal India</i>
3.00 – 3.20 pm	Altamashuddinkhan Nadimalla ¹ , Siti Aliyyah Masjuki ¹ , Siti Asmahani Saad ¹ , Maisarah Ali ¹ ICMAAE21-20: Machine Learning Model to Predict Slum, Vebe and Compaction Factor of M Sand and Shredded Pet Bottles Concrete <i>¹International Islamic University Malaysia</i>
3.20 – 3.40 pm	Wan Ahmad Bin Wan Azhar ¹ , Tanveer Saleh ² , Mohd Asyraf Bin Mohd Razib ³ ICMAAE21-22: Development of Micro-EDM Machine with Process Parameter Control for Micro-EDM Drilling <i>¹International Islamic University Malaysia</i>

SESSION 6 (ICMAAE ROOM C)

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Wednesday, June 23: 2:00 – 3:40pm (Asia / Kuala Lumpur GMT +8)

Chairman: Asst. Prof. Dr. Norfazrina Hayati Binti Mohd Yatim
Co- chairman: Asst. Prof. Dr. Mohd. Azan Mohammed Sapardi

2.00 – 2.20 pm	A. Saouab ¹ , H. Chouiyakh ¹ , M. Faqir ¹ , K. Bouchaala ¹ , M.F. Ghanameh ¹ , E. Essadiqi ¹ ICMAAE21-61: Investigation of Multistage Damage Detection Based on Lamb Waves <i>¹Université Internationale de Rabat</i>
2.20 – 2.40 pm	Mohamed Djemana ¹ , Meftah Hrairi ² and Norfazrina H. M. Yatim ² ICMAAE21-121: Numerical Simulation of Electromechanical Impedance-Based Damage Monitoring of Metallic Structures <i>¹École Supérieure de Technologies Industrielles, ²International Islamic University Malaysia</i>
2.40 – 3.00 pm	Mohamed Djemana ¹ , Meftah Hrairi ² and Norfazrina H. M. Yatim ² ICMAAE21-123: Temperature Influence on Electromechanical Impedance Method Used for Damage Detection in Metallic Structure <i>¹École Supérieure de Technologies Industrielles, ²International Islamic University Malaysia</i>
3.00 – 3.20 pm	Mohamoud Hussein Mohamed ¹ , Ali Sophian ¹ , Nadzril Sulaiman ¹ , Erry Yulian Triblas Adesta ¹ ICMAAE21-116: Tunnel-Magnetoresistive-Based Pulsed Eddy Current Probe for Inspection of Corrosion Under Insulation <i>¹International Islamic University Malaysia</i>
3.20 – 3.40 pm	Sabir Beroual, Meftah Hrairi and Mohd Sultan Ibrahim Shaik Dawood ICMAAE21-125: Structural Finite Element Analysis for Crack Detection in Silicon Plate Using EMI Technique <i>International Islamic University Malaysia</i>

SESSION 6 (ICMAAE ROOM D)

Special Topics II

Wednesday, June 23: 2:00 – 3:40pm (Asia / Kuala Lumpur GMT +8)

Chairman: Asst. Prof. Dr. Hilmi Hela Ladin
Co- chairman: Assoc. Prof. Dr. Erwin Sulaeman

2.00 – 2.20 pm	Mohamed Ibren ¹ , Amelda Dianne ^{1,*} , Waqar Asrar ¹ , Erwin Sulaeman ¹ ICMAAE21-66: A Review on Generation and Mitigation of Airfoil Self-Induced Noise <i>¹International Islamic University Malaysia</i>
2.20 – 2.40 pm	Indranil Ghosh ¹ , M.S.H. Chowdhury ^{1,*} , Suazlan Mt Aznam ¹ ICMAAE21-77: New Iterative Method (NIM): A Semi-Analytic Solution for Rössler System <i>¹International Islamic University Malaysia</i>
2.40 – 3.00 pm	Moumen Idres ^{1,*} , Ahmad Hazwan Mohd Nizam ¹ , Wan Muhammad Adam Wan Mohamad Fathi ¹ , Mohamed Okasha ^{1,2} ICMAAE21-126: Optimization of Fuel Economy for A Multimode Plug-In Hybrid Electric Vehicle <i>¹International Islamic University Malaysia, ²United Arab Emirates University</i>
3.00 – 3.20 pm	Jalal Mohammed Zayan, Akbar John*, Abdul Khaliq Rasheed, Batoul Alallam, Mohammed Khalid and Ahmad Faris Ismail, Hamzah Salleh ICMAAE21-131: EARLIER DENATURATION OF DNA BY USING NOVEL TERNARY HYBRID NANOPARTICLES <i>¹International Islamic University Malaysia</i>
3.20 – 3.40 pm	



SESSION 7 (ICMAAE ROOM A)

Modelling & Simulation

Tuesday, June 22: 4:00 – 5:20pm (Asia / Kuala Lumpur GMT +8)

Chairman: Assoc. Prof. Dr. Salmiah Ahmad
Co- chairman: Asst. Prof. Dr. Nabilah Ramli

4.00 – 4.20 pm	Rully Medianto ¹ , Nafiah M. Adinda ¹ , Yazdi I. Jenie ¹ , Hisar Pasaribu ¹ , Hari Muhammad ICMAAE21-65: Terminal Control Area Complexity Measurement Using Simulation Model <i>¹Bandung Institute of Technology</i>
4.20 – 4.40 pm	Mohd Zul Amzar Zulkifli ¹ , Azfarizal Mukhtar ^{1,*} , Muhammad Faizulizwan Mohamad Fadli ¹ , Anis Muneerah Shaiful Bahari ¹ , Halina Misran ¹ ICMAAE21-45: CFD Simulation of CO ₂ and Methane Adsorption at Various Temperature for MOF-5 using Dual-site and Single-site Langmuir Model <i>¹Universiti Tenaga Nasional</i>
4.40 – 5.00 pm	S. Y. Cetin ¹ , M. A. Maleque ^{2,*} and H.H. Masjuki ¹ , ICMAAE21-42: Simulation of Wear Map for Biodiesel Interacted Automotive Materials <i>¹International Islamic University Malaysia</i>
5.00 – 5.20 pm	Hazril Md Isa ¹ , Salamiah Ahmad ¹ , Muhammad. Abdullah ¹ , Aatur Rahman ¹ , N. M. A. Ghani ² , N.M. M.Noor ³ ICMAAE21-69: Modelling and Analysis of Pedals Pressing Mechanism for Low Speed Driving in Road Traffic Delay <i>¹International Islamic University Malaysia, ²University Malaysia Pahang, ³University Technology MARA¹</i>

SESSION 7 (ICMAAE ROOM B)

Aerospace Structures III

Wednesday, June 23: 4:00 – 5:20pm (Asia / Kuala Lumpur GMT +8)

Chairman: Asst. Prof. Dr. Mohd Farid Bin Aladdin
Co- chairman: Asst. Prof. Dr. Norfazrina Hayati Binti Mohd Yatim

4.00 – 4.20 pm	Tengku Muhammad Afif, Mohamed Ali Jaffar Syed, Erwin Sulaeman and Meftah Hrairi ICMAAE21-109: Finite Element Analysis of Composite Laminates under Electromechanical Load <i>¹International Islamic University Malaysia</i>
4.20 – 4.40 pm	Sharifah Nadhirah Syed Abd Rahman, Mohamed Ali Jaffar Syed and Mohamed Sultan Ibrahim Shaik Dawood ICMAAE21-110: Crash Analysis of Aircraft Composite Fuselage under Belly Landing <i>¹International Islamic University Malaysia</i>
4.40 – 5.00 pm	Muhammad Rahman, S Alsabari, Mohamed Ali Jaffar Syed, Meftah Hrairi and Mohd Sultan Ibrahim Shaik Dawood ICMAAE21-128: Assessment of Shell Theories for Cross-Ply and Angle-Ply Laminated Cylindrical Shells under Thermo-Mechanical Loads <i>¹International Islamic University Malaysia</i>
5.00 – 5.20 pm	Mohamed Ali Jaffar Syed, Wan Muhammad Hafizuddin W Embong W Embong and Abdul Aabid ICMAAE21-112: Effect of Cut-Out Shape on the Stresses in Aircraft Wing Ribs <i>¹International Islamic University Malaysia</i>

SESSION 7 (ICMAAE ROOM C)

Structures & Materials V

Wednesday, June 23: 4:00 – 5:20pm (Asia / Kuala Lumpur GMT +8)

Chairman Assoc. Prof. Dr. Mohd Sultan Ibrahim
Co- chairman: Asst. Prof. Dr. Syed Noh Syed Abu Bakar

4.00 – 4.20 pm	Zahir Hanouf, Ahmed Abdelrhman and Kartini Ahmad ICMAAE21-27: An Investigation of Dynamic Structural Modification of A Machine Casing	Bahrain
4.20 – 4.40 pm	A.N. Md Idriss ¹ and S. Kasolang ^{1,2} ICMAAE21-57: Dry Sliding Wear of Open Cell Aluminum Foam Against Mild Steel and Their Observed Surface Profile Under The Downlight and 450 Light.	¹ Universiti Teknologi MARA
4.40 – 5.00 pm	A. N. Md Idriss ¹ , M. A. Maleque ¹ , A. Afiq ² ICMAAE21-34: The Effect of Working Distances on The Formation of Tic Composite Surface Hardening Using Tig Melting Technique	¹ International Islamic University Malaysia, ² TNB Research Bhd
5.00 – 5.20 pm	N. Haris, and E. Sulaeman ICMAAE21-83: Convergence of a high order non-prismatic slender Beam Finite Element using Galerkin's approach.	International Islamic University Malaysia

SESSION 7 (ICMAAE ROOM D)

Structures & Materials VI

Wednesday, June 23: 4:00 – 5:20pm (Asia / Kuala Lumpur GMT +8)

Chairman Asst. Prof. Dr. Amelda Dianne Andan
Co- chairman: Asst. Prof. Dr. Fatimah Dzaharudin

4.00 – 4.20 pm	Ahmed Ouezgan ¹ , Mouad Bellahkim ¹ , Said Adima ¹ , Aziz Maziri ¹ , El Hassan Mallil ¹ , Jamal Echaabi ¹ . ICMAAE21-75: Resin Film infusion process: Numerical Algorithm	¹ Université Hassan II de Casablanca
4.20 – 4.40 pm	Md Abdul Maleque, M. Farisuzzdin Farisuzzdin, A. Afiq and H H Masjuki ICMAAE21-59: Hybrid Composite Coating for High Temperature Application	International Islamic University Malaysia
4.40 – 5.00 pm	Aisyah Madihah Mustafa ¹ , Najlah Sakinah Shahrudin ¹ , Nor Farah Huda Abd Halim ^{1*} , Alya Nayli Rozhan ¹ , Maziati Akmal Hattiar ¹ ICMAAE21-104: The Effect of Cutting Speeds on Tool Wear and Surface Roughness when Milling Carbon Fiber Reinforced Polymer (CFRP)	¹ International Islamic University Malaysia
5.00 – 5.20 pm	Atifatul Ismah Binti Ismail ¹ , Sher Afghan Khan ¹ , Parvathy Rajendaran ² and Erwin Sulaeman ¹ ICMAAE21-81: Effect Of Cavities In Suddenly Expanded Flow At Supersonic Mach Number	¹ International Islamic University Malaysia, ² Universiti Sains Malaysia

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